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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,911	12/18/2001	Kit Yeng Lim	SBI-100	4817

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EXAMINER

RAMANA, ANURADHA

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/023,911

Applicant(s)

LIM ET AL.

Examiner

Anu Ramana

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 3
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

The disclosure is objected to because of the use of the Trademark "Phillips" (Page 9, line 31) and GFm (Page 8, line 2). Trademarks should be capitalized wherever they appear and should be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, their proprietary nature should be respected and every effort made to prevent their use in any manner that might adversely affect their validity as trademarks. Appropriate correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name.

Claim 8 contains the trademark/trade name GFm in line 3, used to identify/describe a material and, accordingly, the identification/description is indefinite.

Claim 33 contains the trademark/trade name "Phillips" in line 2, used to identify/describe a tool and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-4, 6, 9-11, 13-16, 18-20, 22-25, 29 and 30-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Michelson (US 6,537,320).

Michelson discloses an implant or plug 20 made of a bioresorbable or “biodegradable” material such as polylactone (“polymer”) having a hollow portion or “bore” 42 containing bone growth inducing or promoting material and retaining members or “ridges” 36, 36’ on its outer surface wherein the plug is sealed at one end by a cap or “sealing member” 46 having a slot to engage a driver or tool for inserting and rotating implant 20 into disc space (Figures 1, 2A, and 2E, col. 11, lines 16-26, col. 12, lines 30-51 and col. 13, lines 24-60).

Michelson also discloses a plurality of openings or “apertures” 38, 38’ on the upper and lower walls 30, 30’, passing through the body and in communication with bore 42 (col. 12, lines 62-67 and col. 13, lines 1-23.)

The method steps of claims 19-20, 2-25, 29 and 30-33 are inherently performed during normal use of the Michelson implant for the purpose of sealing an intervertebral defect (Figure 3A, col. 18, lines 51-67 and col. 19, lines 1-31).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 7-8, 12, 15, 17, 21, 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelson in view of Boyce et al. (US 6,294,187).

Regarding claims 5, 15 and 26, Michelson does not disclose specific types of biodegradable polymers.

Boyce et al. teach biodegradable polymers such as polylactic-co-glycolic acid, polycaprolactone, polycyanoacrylates etc. (col. 8, lines 23-40).

Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention to have made the Michelson implant of a biodegradable polymer, as taught by Boyce et al. to make the Michelson implant biodegradable.

The method steps of claim 26 are performed during normal use of the Michelson-Boyce et al. implant for sealing an intervertebral defect.

Regarding claims 7-8, 12, 17, 21, 27 and 28, Michelson does not disclose specific types of bone growth materials.

Boyce et al. teach the use of bioactive substances such as antibiotics, living cells, peptides, growth factors such as TGF-beta, bone morphogenetic proteins (BMPs), angiogenic agents etc. (col. 9, lines 31-67) in an implant.

Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the bioactive substances taught by Boyce et al. in the Michelson implant to promote bone growth.

The method steps of claims 21, 27 and 28 are performed during normal use of the Michelson-Boyce et al. implant for sealing an intervertebral defect.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anu Ramana whose telephone number is (703) 306-4035. The examiner can normally be reached Monday through Friday between 8:30 am and 4:30 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached at (703) 308-2582. The fax phone numbers for the

Art Unit: 3732

organization where this application or proceeding is assigned are (703) 308-2708 for regular communications and (703) 308-2708 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

AR *Anunadha Ramana*
May 15, 2003


EDUARDO C. ROBERT
PRIMARY EXAMINER